

The Claims

1. (Previously presented) A computer-implemented method comprising:

creating a license pack at a license generator, the license pack containing a set of one or more individual software licenses;

signing the license pack with a digital signature of the license generator;

associating an ID of the license pack with a license server, the ID uniquely identifying the license pack;

maintaining the association at the license generator;

issuing the license pack to the license server;

verifying, at the license server, the license generator's digital signature on the license pack; and

distributing the software licenses contained in the license pack from the license server to corresponding clients.

2. (Previously presented) A computer-implemented method as recited in claim 1, further comprising creating a license pack containing a predefined number of software licenses.

3. (Previously presented) A computer-implemented method as recited in claim 1, further comprising:

creating a license pack ID at the license generator; and

evaluating the license pack ID at the license server.

4. (Previously presented) A computer-implemented method as recited in claim 1, further comprising:

encrypting the license pack at the license generator; and

decrypting the license pack at the license server.

5. (Previously presented) A computer-implemented method as recited in claim 1, further comprising creating a license pack that is tailored to a particular operating platform of the clients.

6. (Previously presented) A computer-implemented method as recited in claim 1, further comprising determining an authenticity of an individual client prior to distributing the software license to that individual client.

7. (Canceled).

8. (Canceled).

9. (Canceled).

10. (Previously presented) A computer-implemented method as recited in claim 1, wherein the license pack has a license pack ID, and

further comprising granting additional licenses for the license pack having the same license pack ID.

11. (Canceled).

12. (Canceled).

13. (Previously presented) A computer-implemented method for distributing software licenses to clients so that the clients may legally execute underlying software to which the software licenses pertain, the computer-implemented method comprising electronically issuing the software licenses as digital certificates that are distributed in one-to-one correlation with individual clients and traced to an issuing authority, and issuing a software license to a particular client only if a client executable image received from the client matches a stored client executable image for the particular client.

14. (Previously presented) A computer-readable medium having computer readable instructions for performing the method as recited in claim 13.

15. (Previously presented) A computer-implemented method comprising:

receiving a request for a software license from a particular license server;

creating a license pack containing a set of one or more individual software licenses;

assigning a license pack ID to the license pack, the license pack ID uniquely identifying the license pack;

associating the license pack ID with the particular license server;

digitally signing the license pack; and

issuing the signed license pack to the particular license server.

16. (Previously presented) A computer-implemented method as recited in claim 15, further comprising creating a license pack containing a predefined number of software licenses.

17. (Previously presented) A computer-implemented method as recited in claim 15, further comprising creating a license pack that includes a platform type indicating a type of operating platform for which the software licenses can be used.

18. (Previously presented) A computer-implemented method as recited in claim 15, further comprising creating a license pack that includes a predefined number of software licenses, a platform type indicating a type of operating platform for which the software licenses can be used, an expiration date indicating a date on which the software licenses will expire,

and a product ID that identifies a product with which the software licenses can be used.

19. (Previously presented) A computer-implemented method as recited in claim 15, further comprising encrypting the license pack.

20. (Previously presented) A computer-readable medium having computer readable instructions for performing the method as recited in claim 15.

21. (Previously presented) A computer-implemented method comprising:

receiving a request for a software license from a particular client;

determining an authenticity of the particular client, wherein the determining includes:

maintaining a set of client images;

receiving a client software ID from the particular client; and

comparing the client software ID to the client images to evaluate whether the client is authentic;

selecting a software license from a pack of software licenses that is appropriate for the particular client, the software license having an associated license ID;

associating the license ID with the particular client; and

granting the software license to the particular client.

22. (Canceled).

23. (Previously presented) A computer-implemented method as recited in claim 21, further comprising granting the software license as containing the license ID, a platform type indicating a type of platform in use by the particular client, an issue date indicates a date on which the license is issued to the client, an expiration date that indicates a date on which the software license will expire, a product ID that identifies a product with which the software licenses can be used, a client ID that identifies the particular client, and a version of the software license.

24. (Previously presented) A computer-implemented method as recited in claim 21, wherein determining the authenticity comprises:
receiving a client software ID from the particular client; and
evaluating the client software ID to determine whether the client is authentic.

25. (Canceled).

26. (Previously presented) A computer-implemented method as recited in claim 21, further comprising:
determining a platform of the particular client; and

selecting the software license as is appropriate for the platform of the particular client.

27. (Previously presented) A computer-implemented method as recited in claim 21, further comprising encrypting the software license using a public key of the particular client.

28. (Canceled).

29. (Previously presented) A computer-readable medium having computer readable instructions for performing the method as recited in claim 21.

30-44. (Canceled).

45. (Previously presented) A system for licensing software, comprising:

a license generator to create a license pack containing a set of one or more individual software licenses, the license generator digitally signing the license pack with a digital signature;

a license server remote from, but operatively coupled to, the license generator to receive the license pack from the license generator, the license server verifying the license generator's digital signature on the license pack

and storing the individual licenses for subsequent distribution to individual clients; and

wherein the license generator is further to assign a license pack ID to the license pack and keep an association of the license pack ID with the license server, the license pack ID uniquely identifying the license pack.

46. (Canceled).

47. (Original) A system as recited in claim 45, wherein the license generator encrypts the license pack using a public key of the license server.

48. (Original) A system as recited in claim 45, wherein the license pack contains a preset number of software licenses.

49. (Original) A system as recited in claim 45, wherein the license pack identifies a type of operating platform for which the software licenses can be used.

50. (Previously presented) A system as recited in claim 45, wherein the license pack comprises at least one of the following items:

a predefined number of software licenses;

a platform type indicating a type of operating platform for which the software licenses can be used;

an expiration date that indicates a date on which the software licenses will expire; and

a product ID that identifies a product with which the software licenses can be used.

51. (Original) A system as recited in claim 45, wherein the license server selects a software license from the license pack and grants the software license to a client, the software license having a license ID and the license server associating the license ID with the client.

52. (Original) A system as recited in claim 45, wherein the license server challenges an authenticity of a client prior to granting a software license from the license pack to the client.

53. (Original) A system as recited in claim 45, wherein the license server grants a software license server to a particular client, the license server encrypting the software license using a public key of the particular client.

54. (Original) A system as recited in claim 45, wherein the license server distributes the software licenses to the individual clients via one or more intermediate servers.

55. (Previously presented) A license generator for issuing packs of software licenses to authorized license servers, comprising:

a request handler to receive a request from a license server for a license pack;

a license producer responsive to the request received by the request handler to generate a license pack containing a set of one or more individual software licenses; and

the license producer assigning a license pack ID to the license pack, associating the license pack ID with the license server, and digitally signing the license pack, the license pack ID uniquely identifying the license pack.

56. (Original) A license generator as recited in claim 55, wherein the license pack contains a predefined number of software licenses, a platform type indicating a type of operating platform for which the software licenses can be used, an expiration date that indicates a date on which the software licenses will expire, and a product ID that identifies a product with which the software licenses can be used.

57. (Original) A license generator as recited in claim 55, wherein the license producer encrypts the license pack using a public key of the license server.

58. (Canceled).

59. (Previously presented) A program embodied on a computer-readable medium, comprising:

a code segment to create a license pack containing a set of one or more individual software licenses;

a code segment to assign a license pack ID to the license pack, the license pack ID uniquely identifying the license pack;

a code segment to associate the license pack ID with the particular license server; and

a code segment to digitally sign the license pack.

60. (Previously presented) A license server for issuing individual software licenses from a software pack received from a licensing clearinghouse, comprising:

a license store to store the software pack of individual software licenses, each software license having an associated license ID;

a request handler to receive a request for a software license from a client;

a client authenticating module to determine, based on a client image received from the client, whether the client is authentic and can receive a software license; and

a granting module to grant a software license from the license store to an authenticated client and to associate the license ID with the authenticated client.

61. (Original) A license server as recited in claim 60, wherein the authenticating module determines an operating platform of the client.

62. (Canceled).

63. (Previously presented) A license server as recited in claim 60, wherein the granting module encrypts the software license using a public key of the authenticated client.

64. (Original) A license server as recited in claim 60, wherein the software license contains at least one of the following items:

- a version indicator of a software license;
- a license ID;
- a client ID that identifies the authenticated client;
- an issue date on which the license is issued to the client;
- a platform type of the client's operating platform for which the software license can be used;
- an expiration date on which the software license will expire; and
- a product ID that identifies a product with which the software licenses can be used.

65. (Original) A license server as recited in claim 60, further comprising a license pack table to store information pertaining to the license pack that is stored in the license store.

66. (Canceled).

67. (Canceled).

68. (Previously presented) A program embodied on a computer-readable medium, comprising:

a code segment to receive a license pack from a license generator,
the license pack containing a set of one or more individual software
licenses;

a code segment to validate the license pack;

a code segment to store the software licenses;

a code segment, responsive to a request for a software license from a client, to determine, based on a client executable image received from the client, whether the client is authentic and can receive a software license;

a code segment to grant a software license to an authenticated client,
the software license containing a license ID; and

a code segment to associate the license ID with the authenticated client.

69. (Original) A client computer, comprising:

a license cache to store one or more software licenses;

a license requestor to request a software license from a license server;

a challenge handler to handle an authenticity challenge from the license server, the challenge handler computing a challenge response that contains a client image that can be used by the license server to evaluate whether the client is authentic and can be licensed; and

whereupon authentication by the license server and granting of a software license, the license requestor receiving the software license from the license server and storing the software license in the license cache.

70. (Canceled).

71. (Original) A program embodied on a computer-readable medium, comprising:

a code segment to receive an authenticity challenge from a license server that distributes software licenses;

a code segment to compute a challenge response that contains a client image that can be used by the license server to evaluate whether the client is authentic and can be licensed; and

a code segment to store the software license granted by the license server in an event that the client is deemed authentic.

72. (Previously presented) A data structure embodied on a computer-readable media, comprising:

a license pack table to record information pertaining to one or more license packs, the license pack table being indexed by license pack IDs that

uniquely identify corresponding individual license packs, each license pack containing one or more software licenses;

a client assignment table to record information pertaining to software licenses that are assigned to clients, the client assignment table being indexed by license IDs that identify individual software licenses, the client assignment table further having the license pack IDs of the license packs from which the corresponding software licenses are issued; and

the license pack table and the client assignment table being correlated via the license pack IDs contained in each table.

73. (Original) A data structure as recited in claim 72, wherein the license pack table contains the following table fields:

a license pack ID field to hold the license pack ID;

a quantity field to hold a number representative of how many software licenses are contained in the license pack;

a platform type field to hold a type of operating platform for which the software licenses in the license pack can be used;

an expiration date field to hold a date on which the software licenses in the license pack will expire; and

a product ID field to hold a product ID that identifies a product with which the software licenses in the license pack can be used.

74. (Original) A data structure as recited in claim 73, wherein the license pack table also contains a number assigned field to hold a number

representative of how many of the software licenses have been assigned to clients.

75. (Original) A data structure as recited in claim 72, wherein the client assignment table contains the following table fields:

a license ID field to hold the license ID;

a license pack ID field to hold the license pack ID;

a client ID to hold an identifier of a client to which the software license is granted; and

an issue date to hold a date on which the software license is issued to the client.

76. (Canceled).

77. (Canceled).

78. (Canceled).

79. (Previously presented) A client computer, comprising:
memory for storing information corresponding to one or more received software licenses;

a license requestor to request a software license from a license server;

a challenge handler to handle an authenticity challenge from the license server, the challenge handler computing a challenge response that contains a client image that can be used by the license server to evaluate whether the client is authentic and can be licensed, wherein the challenge contains a random number, and the challenge handler computes the challenge response by concatenating the random number with the client image to form a concatenated value and hashing the concatenated value; and

wherein, upon authentication by the license server and granting of a software license, the license requestor receiving the software license from the license server saves in the memory information corresponding to the received license.

80. (Previously presented) The client computer of claim 79, wherein the memory comprises non-volatile memory.

81. (Previously presented) The client computer of claim 79, wherein the saved information corresponding to the received license comprises the received license.

82. (Previously presented) The client computer of claim 79, wherein the saved information corresponding to the received license comprises an indication that a specific license was granted.

83. (Previously presented) A computer-readable medium, having computer readable instructions for:

requesting a software license from a license server;

receiving an authenticity challenge from the license server;

computing a challenge response that contains a client image that can be used by the license server to evaluate whether the client is authentic and can be licensed; and

receiving, upon authentication by the license server and granting of a software license, the software license from the license server and storing information corresponding to the software license in a memory.

84. (Previously presented) The computer-readable medium of claim 83, wherein the stored information corresponding to the received software license comprises the received software license.

85. (Previously presented) The computer-readable medium of claim 83, wherein the stored information corresponding to the received software license comprises an indication that a specific license was granted.

86. (Previously presented) A client computer, comprising:
means for storing information corresponding to one or more received software licenses;

means for requesting a software license from a license server;

means for handling an authenticity challenge from the license server, the means for handling computing a challenge response that contains a client image that can be used by the license server to evaluate whether the client is authentic and can be licensed, wherein the challenge contains a random number, and the means for handling computes the challenge response by concatenating the random number with the client image to form a concatenated value and hashing the concatenated value; and

wherein, upon authentication by the license server and granting of a software license, the means for requesting receiving the software license from the license server saves in the memory information corresponding to the received license.

87. (Previously presented) The client computer of claim 86, wherein the saved information corresponding to the received license comprises the received license.

88. (Previously presented) The client computer of claim 86, wherein the saved information corresponding to the received license comprises an indication that a specific license was granted.